

ARC-14586-1

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re application of: Man Mohan Rai

Serial No: 10/043,044

Group No.: 2122

Filed: January 7, 2002

Examiner: Not Assigned

For: "A Hybrid Neural Network and Support Vector Machine Method for Optimization"

Box Patent Application  
Commissioner for Patents  
Washington, DC 20231

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TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT  
WITHIN THREE MONTHS OF FILING OR  
BEFORE MAILING OF FIRST OFFICE ACTION [37 C.F.R. 1.97(b)]

IDENTIFICATION OF TIME OF FILING THE ACCOMPANYING  
INFORMATION DISCLOSURE STATEMENT

1. The information disclosure statement submitted herewith is being filed within three months of the filing date of the application or the date of entry into the national stage of an international application or before the mailing date of a first Office action on the merits, whichever event occurs last [37 C.F.R. 1.97(b)].

Reg. No.: 38,987

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312-02

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date

Certificate of Mailing/Transmission (37 CFR 1.8(a))

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is, on the date shown below, being:

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Date: March 13, 2002

Signature: Vickie L. Kent 03/13/02  
Vickie L. Kent

☐ transmitted by facsimile to the Patent and Trademark Office.



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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Man Mohan Rai

U.S. Serial No: 10/ 043,044

Group Art Unit: 2122

Filing Date: January 7, 2002

Examiner: not assigned

Title: "A COMBINED NEURAL NETWORK-SUPPORT  
VECTOR MACHINE FOR OPTIMIZATION"

Assistant Commissioner for Patents  
Washington, D.C. 20231

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Supplement For Information Disclosure Statement Form 1449

Dear Sir:

The Applicants herewith submit Form 1449, relating to an Information Disclosure Statement for the above-identified patent application and herewith submit a photocopy of, and a summary of the relevance of, each of the I.D.S. references.

M.M. Rai et al, "Aerodynamic Design Using Neural Networks." This article discusses a pure neural network approach for identifying or designing a shape of an aerodynamic component, using polynomial approximations to construct a composite response surface. In one example, a target pressure distribution along a turbine airfoil is used to determine an appropriate airfoil shape.

V.N. Vapnik, "An Overview of Statistical Learning Theory." This article discusses the mathematics of separate use of neural network learning algorithms and support vector machines and use of separating hyperplanes in a modeling space.

March 12, 2002  
Date: ~~February~~, 2002

Respectfully Submitted

*Robert M. Padilla*  
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Patent Attorney for Applicant

Reg. No. 38,987